

In the Claims

1           1. [Currently Amended] A laser scanning apparatus comprising:  
2           a light source configured to ~~emit~~ generate a light beam ~~in a single~~  
3 ~~direction;~~  
4           a scanning device optically coupled with the light source and configured  
5 to scan the light beam along a photoconductor in a plurality of scan lines; and  
6           a start-of-scan detector assembly configured to sample the light beam  
7 and initiate a start-of-scan operation of one of the scan lines of information to be  
8 written on the photoconductor, and wherein the sampled light beam is used to  
9 control a drive level of the light source.

1           2. [Original] The apparatus of claim 1, further comprising:  
2           a control system configured to receive a signal from the detector  
3 assembly and to control the drive level of the light source based on the signal.

1           3. [Original] The apparatus of claim 2, wherein the control system  
2 comprises processing circuitry configured to compare an indication of the  
3 sampled light beam from the signal with a predetermined value.

1           4. [Original] The apparatus of claim 2, wherein the control system is  
2 configured to maintain the drive level of the light source at a predetermined drive  
3 level during scanning of the one scan line.

1           5. [Original] The apparatus of claim 1, wherein the light source  
2 comprises a vertical cavity surface emitting laser diode (VCSEL).

1           6. [Original] The apparatus of claim 1, wherein the light beam is sampled  
2 only once per scan line of information written on the photoconductor, and the  
3 light beam is sampled prior to writing the scan line of information on the  
4 photoconductor.

PDNO. 10011570-1  
Serial No. 10/700,956  
Amendment A

1           7. [Original] The apparatus of claim 1, wherein the scanning device  
2 comprises a rotating polygon mirror.

1           8. [Original] The apparatus of claim 1, wherein the start-of-scan detector  
2 assembly is disposed outside of a scan area of the photoconductor.

1           9. [Currently Amended] A laser scanning apparatus comprising:  
2 a rotating scanning device configured to scan a light beam from a light  
3 source;  
4 a photodetector optically coupled with the rotating scanning device and  
5 configured to sample the light beam from the rotating scanning device; ~~and~~  
6 a control system configured to receive an indication of the sampled light  
7 beam from the photodetector and to control a drive level of the light source  
8 responsive to the indication of the sampled light; and  
9 wherein the control system is configured to maintain the light source at a  
10 constant drive level during scanning of a single line of information on the  
11 photoconductor.

1           10. [Original] The apparatus of claim 9, wherein the light source is  
2 configured to emit light in a single direction.

1           11. [Original] The apparatus of claim 9, wherein the light source  
2 comprises a vertical cavity surface emission laser diode (VCSEL).

1           12. [Original] The apparatus of claim 9, wherein the control system  
2 comprises processing circuitry configured to compare an indication of the  
3 sampled light beam with a predetermined drive level value, and to control the  
4 drive level of the light source based on the comparison.

1           13. Cancel.

PDNO. 10011570-1  
Serial No. 10/700,956  
Amendment A

1 14. [Currently Amended] A laser scanning apparatus comprising:  
2 a laser configured to generate a light beam;  
3 a scanning device configured to scan ~~[[a]]~~ the light beam from ~~a light~~  
4 ~~source~~ the laser;  
5 a photodetector optically coupled with the scanning device and  
6 configured to sample the light beam only once per line of information scanned  
7 onto a photoconductor; and  
8 a control system configured to receive an indication of the sampled light  
9 beam from the photodetector and to maintain a drive level of the ~~light source~~  
10 laser at a constant drive level during scanning of the line of information onto the  
11 photoconductor.

1 15. [Currently Amended] The apparatus of claim 14, wherein the ~~light~~  
2 ~~source~~ laser is configured to emit a light beam in a single direction.

1 16. [Currently Amended] The apparatus of claim 14, wherein the  
2 photodetector is utilized to initiate a start of scan operation of the line of  
3 information.

1 17. [Original] The apparatus of claim 14, wherein the sampled light  
2 beam is obtained before scanning a line of information onto the photoconductor.

1 18. [Currently Amended] A laser scanning apparatus comprising:  
2 means for generating a light beam;  
3 means for scanning ~~[[a]]~~ the light beam ~~from a light source~~ onto a  
4 photoconductor;  
5 means for sampling the light beam which causes information to be  
6 scanned onto the photoconductor; and  
7 means for receiving an indication of the sampled light beam from the  
8 means for sampling and for maintaining the ~~light source~~ means for generating at  
9 a constant drive level using the indication of the sampled light beam and during  
10 scanning of the line of information onto the photoconductor.

PDNO. 10011570-1  
Serial No. 10/700,956  
Amendment A

1            19. [Currently Amended] The apparatus of claim 18, wherein the light  
2 ~~source is a vertical cavity surface emitting laser diode (VCSEL)~~ means for  
3 generating comprises a laser.

1            20. [Original] The apparatus of claim 18, wherein the light beam is  
2 sampled before writing a scan line of information onto the photoconductor.

1            21. [Original] The apparatus of claim 18, wherein the means for sampling  
2 is disposed outside of a scan area of the photoconductor.

1            22. [Currently Amended] A laser scanning method comprising:  
2 emitting generating a light beam ~~in a single direction~~ using a light source;  
3 providing a rotating scanning device and a photoconductor;  
4 scanning the light beam along the photoconductor using the rotating  
5 scanning device;  
6 sampling the light beam from the rotating scanning device using a  
7 sampling assembly; and  
8 ~~controlling a drive level of the light source~~ using responsive to the  
9 sampled light beam.

1            23. [Original] The method of claim 22, further comprising:  
2 initiating writing of a scan line of information onto the photoconductor  
3 using the sampling assembly.

1            24. [Currently Amended] The method of claim 22, wherein the  
2 controlling comprises:  
3 receiving the sampled light beam in a control system;  
4 comparing an indication of the sampled light beam with a predetermined  
5 drive level value; and  
6 wherein the controlling comprises controlling ~~the~~ a drive level of the light  
7 source responsive to the comparison.

PDNO. 10011570-1  
Serial No. 10/700,956  
Amendment A

1           25. [Original] The method of claim 22, further comprising:  
2           maintaining an output power of the light source at a constant level during  
3           writing of a single scan line of information onto the photoconductor.

1           26. [Original] The method of claim 22, wherein the light source  
2           comprises a vertical cavity surface emitting laser diode (VCSEL).

1           27. [Original] The method of claim 22, wherein the sampling is  
2           performed only once per scan line of information written on the photoconductor  
3           and prior to writing the scan line of information on the photoconductor.

1           28. [Original] The method of claim 22, wherein the sampling assembly is  
2           located outside of a scan area of the photoconductor.

1           29. [Currently Amended] A hard imaging device comprising:  
2           a photoconductor;  
3           a laser scanning apparatus configured to write scan lines of information  
4           onto the photoconductor, the laser scanning apparatus comprising:  
5                 ~~a light source~~ laser configured to ~~emit~~ generate a light beam in a  
6                 ~~single direction~~;  
7                 a scanning device optically coupled with the ~~light source~~ laser and  
8                 configured to scan the light beam along the photoconductor to form the scan  
9                 lines; and  
10                a sampling assembly configured to sample the light beam ~~and to~~  
11                ~~initiate start of scan operations to write the scan lines onto the photoconductor,~~  
12                ~~and wherein the sampled light beam is used to control a drive level of the light~~  
13                ~~source; and~~  
14                a control system configured to control an intensity of the light  
15                beam generated by the laser responsive to the sampled light beam; and  
16                an image engine configured to form hard images from the written scan  
17                lines using media.

PDNO. 10011570-1  
Serial No. 10/700,956  
Amendment A

1           30. [Currently Amended] The device of claim 29, wherein the laser  
2 ~~scanning apparatus further comprises:~~  
3           ~~a control system configured to receive a signal from the sampling~~  
4 ~~assembly and to control the drive level of the light source based on the received~~  
5 signal control system is configured to receive a signal from the sampling  
6 assembly corresponding to the sampled light beam and to control a drive level of  
7 the light source based on the received signal.

1           31. [Original] An article of manufacture comprising:  
2           processor-usable media comprising programming configured to cause  
3 processing circuitry to:  
4           output a control signal to control a light source configured to  
5 generate a light beam used to scan a plurality of scan lines of information onto a  
6 photoconductor;  
7           access an output of a start-of-scan detector assembly generated  
8 responsive to detection of the light beam thereby, wherein the output indicates  
9 appropriate timing for initiation of writing of the information for the respective  
10 scan lines;  
11           process the output of the start-of-scan detector assembly; and  
12           adjust the control signal responsive to the processing of the output  
13 to adjust an intensity of the light beam generated by the light source.

1           32. [Original] The article of manufacture of claim 31, wherein the  
2 programming is further configured to cause the processing circuitry to adjust the  
3 control signal to provide the light beam having a substantially constant intensity  
4 during the scanning of the scan lines.

1           33. [New] The apparatus of claim 1 wherein the light source  
2 comprises a laser configured to generate the light beam.

1           34. [New] The apparatus of claim 33 wherein the laser is configured  
2 to generate all of the photons of the light beam which is sampled by the  
3 detector assembly.

PDNO. 10011570-1  
Serial No. 10/700,956  
Amendment A

1           35. [New] The apparatus of claim 33 wherein the laser is configured  
2 to generate the light beam void of any light received by the laser.

1           36. [New] The apparatus of claim 33 further comprising a control  
2 system configured to provide a control signal to control the drive level of the  
3 laser during the generation of the light beam, and wherein the control system is  
4 configured to vary the control signal responsive to the sampled light beam.

1           37. [New] The apparatus of claim 1 wherein the light source is  
2 configured to generate an entirety of the light beam for the first time, and  
3 wherein the light beam is void of any other light generated by a source different  
4 than the light source.

1           38. [New] The apparatus of claim 9 further comprising the light source  
2 comprising a laser configured to generate the light beam.

1           39. [New] The apparatus of claim 14 wherein the control system is  
2 configured to maintain the drive level of the laser responsive to the indication.

1           40. [New] The method of claim 22 wherein the generating comprises  
2 generating using the light source comprising a laser, and the controlling  
3 comprises controlling the laser using the sampled light beam.

1           41. [New] The method of claim 22 wherein the generating comprises  
2 generating all light of the light beam using the light source.

1           42. [New] The method of claim 22 wherein the controlling comprises:  
2 applying a control signal to control the light source; and  
3 varying the control signal responsive to the sampled light beam.

1           43. [New] The method of claim 43 wherein the varying comprises  
2 varying to control the light source to generate the light beam having a  
3 substantially constant intensity.

*PDNO. 10011570-1  
Serial No. 10/700,956  
Amendment A*

1           44.   [New] The device of claim 29 wherein the sampling assembly is  
2 configured to initiate start-of-scan operations to write the scan lines onto the  
3 photoconductor.

*PDNO. 10011570-1*  
*Serial No. 10/700,956*  
*Amendment A*